



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,604	01/18/2002	Masakazu Ogasawara	Q68036	4626

7590 06/29/2005

Darryl Mexic
SUGHRUE MION, PLLC
2100 Pennsylvania Avenue NW
Washington, DC 20037-3213

EXAMINER

CHOW, LIXI

ART UNIT PAPER NUMBER

2652

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,604

Applicant(s)

OGASAWARA, MASAKAZU

Examiner

Lixi Chow

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

jm

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 3-8 have been considered but are moot in view of the new ground(s) of rejection.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 7, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kikuchi (6,885,616).

Referring to claim 1:

Kikuchi discloses an aberration correcting apparatus for correcting aberration in an optical path of an optical system which irradiates a recording medium with a light beam and guides the light beam reflected from said recording medium, comprising:

a first aberration correction element movable along the optical axis of said light beam for correcting the aberration of the light beam (see Fig. 9, element 13 corresponds to the first aberration correction element);

a driver for positioning said first aberration correction element along the optical axis in response to a drive control signal (see Fig. 9 and Col. 10, lines 40-50);

a second aberration correction element having a plurality of phase adjustment portions each generating an amount of phase change in the light beam, the amount corresponding to an

Art Unit: 2652

adjustment signal (see Fig. 9, element 12 corresponds to the second aberration correction element; also see Col. 8, lines 42-46);

a phase adjuster for supplying said adjustment signal to the respective adjustment portions in response to a phase control signal (see Col. 8, lines 1-60; the driving circuit 21 depicted in Fig. 9, provides the phase control signal to different areas of the phase device 12);

a light receiver for receiving the light beam reflected from said recording medium to generate a light-receiving signal (see Fig. 9, element 17); and

a controller for generating said drive control signal and said phase control signal based on said light-receiving signal (see Fig. 9, element 18), wherein said phase adjuster corrects a residual aberration after correction by said first aberration correction element (Col. 15, lines 34-36 suggest that the position of the first and second aberration correction elements can be exchanged; therefore, the phase device 12 corrects the residual aberration after correction by the aberration compensation lens 13).

Referring to claim 7:

Kikuchi discloses the aberration correcting apparatus as in claim 1, further comprising an object lens for focusing the light beam on said recording medium, said second aberration correction element being fixed to said object lens (see Col. 15, lines 36-37; Kikuchi suggests that it is possible to arrange the phase device 12, which corresponds to the second aberration correction element, on the objective lens side).

Referring to claim 8:

Kikuchi discloses the aberration correcting apparatus as in claim 1, wherein said second aberration correction element is a liquid crystal panel (see Col. 8, lines 8-21).

Art Unit: 2652

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Best (US 5,905,700).

Kikuchi discloses all the limitations that are in claim 1 for the reason above in the 102 rejection.

Referring to claim 3:

Kikuchi does not, but Best discloses an aberration correcting apparatus, wherein said first aberration correcting element includes a concave lens and a convex lens sequentially arranged from a light source of the light beam, and said driver drives said convex lens (see Fig. 14 and Col. 12, lines 19-39).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to drive the convex lens in the compensation lens system 13 of Kikuchi as suggested by Best. One of ordinary skill in the art would have been motivated to do this, because a less complicated aberration correction apparatus can be achieved by only driving one of the lenses in a two lenses system.

Referring to claim 4:

Kikuchi does not, but Best discloses an aberration correcting apparatus, wherein said first aberration correcting element includes a concave lens and a convex lens sequentially arranged

Art Unit: 2652

from a light source of the light beam, and said driver drives said concave lens (see Fig. 14 and Col. 12, lines 19-39).

The motivation for combining the teaching of Kikuchi and Best is the same as the motivation provided for claim 3.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Ueda (US 6,418,108).

Kikuchi discloses all the limitations that in claim 1 for the reason above in the 102 rejection.

Referring to claim 5:

Kikuchi does not, but Ueda discloses an aberration correction apparatus, wherein said first aberration correction element includes a collimating lens for collimating the light emitted from a light source of the light beam (see Ueda, Fig. 1 and Col. 6, lines 46-59).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify Kikuchi's aberration correction element with Ueda's aberration correction element that includes a collimating lens. One of ordinary skill in the art would have been motivated to carry out the modification, because collimating lens is capable of turning incident light into diverging light or converging light to correct the spherical aberration (see Ueda, Col. 6, lines 55-58).

Referring to claim 6:

Kikuchi does not, but Ueda discloses an aberration correction apparatus, wherein said first aberration correction element includes a collimating lens for collimating the light emitted from a light source of the light beam, and said driver changes a distance between said light

Art Unit: 2652

source and said collimating lens (see Ueda, Col. 6, lines 46-59; the actuator 14 drives the collimating lens in direction along the optical axis).

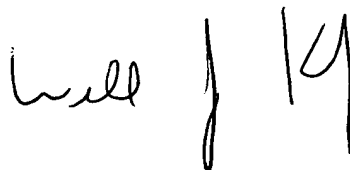
The motivation for combining the teaching of Kikuchi and Ueda is the same as the motivation provided for claim 5.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lixi Chow whose telephone number is 571-272-7571. The examiner can normally be reached on Mon-Fri, 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LC 6/14/05

A handwritten signature in black ink, appearing to read 'William J. 14'.

WILLIAM KLIMOWICZ
PRIMARY EXAMINER